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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,720	01/04/2006	Heinz Bernhardt	2002P18326WOUS	7818

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SIEMENS CORPORATION
INTELLECTUAL PROPERTY DEPARTMENT
170 WOOD AVENUE SOUTH
ISELIN, NJ 08830

EXAMINER

MASINICK, MICHAEL D

ART UNIT	PAPER NUMBER
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2128

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/535,720	Applicant(s) BERNHARDT ET AL.	
	Examiner Michael D. Masinick	Art Unit 2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/19/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 27-46 are pending in this application. This is the first office action on the merits. The international priority date is established as 11/21/2002, while the US priority date is established as 10/30/2003.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 27-32, and 35-45 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by U.S. Patent No. 5,610,828 to Kodosky.

3. It is first noted that Kodosky uses LabVIEW software provided by National Instruments Corporation as the embodiment of their invention. Applicant is asked to review all Non-Patent Literature cited regarding the capabilities of the LabVIEW software when responding to this office action.

4. Referring to claim 27, Kodosky shows a system for the layout-oriented recording of control-relevant information, comprising: a first mechanism for graphically describing structures comprising components (Column 8, "Virtual Instrument" – examiner notes that this can refer to a software based module executed in LabVIEW or a control interface to a piece of hardware); a second mechanism for graphically establishing at least one directed relationship between the components (lines connect the virtual instruments – for example in Figure 22); and a third

mechanism for specifying a control-relevant interconnection of the components depending on the established relationships (Figures 56-58, for example, show interconnection of control functions using direct connections with data types (figure 58) or through arithmetic functions (Figure 56)).

5. Referring to claim 28, Kodosky shows wherein the components are physical components (Virtual instruments are programming interfaces to actually physical components).

6. Referring to claim 29, Kodosky shows wherein the control-relevant information is provided for recording for an automation system of a process-engineering and/or production-engineering plant (Column 43, lines 27-35).

7. Referring to claim 30, Kodosky shows wherein the components are embodied as types having type-dependent properties and data interfaces (Figure 58).

8. Referring to claim 31, Kodosky shows wherein the types are provided in a library (Figure 56).

9. Referring to claim 32, Kodosky shows wherein the interconnection of the components is accomplished via the data interfaces (Figure 56 is established for data communication between components).

10. Referring to claim 35, Kodosky shows wherein the establishment of the directed relationships between data interfaces of adjacent components is accomplished on the basis of a distance of the components from each other and by using information about the data interfaces. GPIB, which is well known as the main type of data transfer BUS for LabVIEW software (circa 1997) has "Total bus length may be up to 20m and the distance between devices may be up to 2m.". See GPIB – IEEE 488 document as a teaching reference. Kodosky shows the use of the GPIB interface in figure 58 and the use of data types in figure 56.

11. Referring to claim 36, Kodosky shows wherein type information, and/or entity information, and/or location information about the components is provided for use from the graphical layout (Figure 22 clearly shows type and entity information as displayed in the icon and the name underneath the icon for each entity).
12. Referring to claim 37, Kodosky shows a fourth mechanism for the layout-oriented adding of further properties to the components. The remainder of the images in Kodosky are used for modifying properties of both the data elements (string control - Figure 29) and the modules themselves (Figure 28).
13. Referring to claim 38, Kodosky shows wherein the components are combined into groups in a layout-oriented manner (Figures 79-83 show the concept of grouping functions).
14. Referring to claim 39. The system according to claim 38, further comprising a layout-oriented assignment of higher-order semantics to the groups (Figure 83 for example).
15. Referring to claim 40, Kodosky shows an assignment of elements for delimiting permitted value ranges, and/or attributes to components, and/or functional groups, and/or data interfaces (figure 109 shows the inputting of a valid range).
16. Referring to claim 41, Kodosky shows a layout-oriented generation of a network configuration for the communication of the components of a process-engineering and/or production-engineering plant (Column 2 and Figure 22).
17. Claims 42-45 are rejected using the same citations as provided above with respect to the claims to which they match.

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claims 33, 34, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,610,828 to Kodosky as shown above in view of U.S. Patent Publication 20030034998, also to Kodosky.

20. With respect to what has been shown above, the first Kodosky patent does not show wherein the directed relationships between the components are arranged on the basis of a material flow in a process-engineering and/or production-engineering plant or an information flow between the components which runs contrary to the material flow.

21. The Patent Publication to Kodosky shows a system for creating configuration diagrams using LabView software similar to the Kodosky Patent. Paragraph 0018 of the publication shows that the communication between graphical objects can include both information flow and material flow. Regarding the information flow and material flow running "contrary", this would be a standard operating procedure when material is delivered and used at a certain station in a production line. The material flow data would indicate one direction that the material has been or is being delivered, and the responding station would respond saying that the material has been received and/or is being used.

22. It would have been obvious to one of ordinary skill at the time the invention was made to use the material flow concept in the LabVIEW system of Kodosky because this would allow for advanced tracking of materials throughout a production process. These documents are obviously analogous art as they are by the same inventor and address the same problems.

Conclusion

Applicant is asked to review all "X reference" documents submitted in the international search report with the IDS in this case to ensure that the claims (current claims or future amendments to the claims) are not read upon by these references. It appears that at least two of them could have been used as USC 102 references with regard to the current claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael D. Masinick whose telephone number is (571) 272-3746. The examiner can normally be reached on Mon-Fri, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached on (571) 272-2279. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2128

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael D Masinick/
Primary Examiner, Art Unit 2128